



SequenceListing ST25.txt
SEQUENCE LISTING

<110> Aarhus University

<120> Modulation of activity of neurotrophins

<130> P700PC00

<160> 13

<170> PatentIn version 3.1

<210> 1

<211> 831

<212> PRT

<213> Homo sapiens

<400> 1

Met Glu Arg Pro Trp Gly Ala Ala Asp Gly Leu Ser Arg Trp Pro His
1 5 10 15

Gly Leu Gly Leu Leu Leu Leu Gln Leu Leu Pro Pro Ser Thr Leu
20 25 30

Ser Gln Asp Arg Leu Asp Ala Pro Pro Pro Pro Ala Ala Pro Leu Pro
35 40 45

Arg Trp Ser Gly Pro Ile Gly Val Ser Trp Gly Leu Arg Ala Ala Ala
50 55 60

Ala Gly Gly Ala Phe Pro Arg Gly Gly Arg Trp Arg Arg Ser Ala Pro
65 70 75 80

Gly Glu Asp Glu Glu Cys Gly Arg Val Arg Asp Phe Val Ala Lys Leu
85 90 95

Ala Asn Asn Thr His Gln His Val Phe Asp Asp Leu Arg Gly Ser Val
100 105 110

Ser Leu Ser Trp Val Gly Asp Ser Thr Gly Val Ile Leu Val Leu Thr
115 120 125

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Thr Phe His Val Pro Leu Val Ile Met Thr Phe Gly Gln Ser Lys Leu
130 135 140

Tyr Arg Ser Glu Asp Tyr Gly Lys Asn Phe Lys Asp Ile Thr Asp Leu
145 150 155 160

Ile Asn Asn Thr Phe Ile Arg Thr Glu Phe Gly Met Ala Ile Gly Pro
165 170 175

Glu Asn Ser Gly Lys Val Val Leu Thr Ala Glu Val Ser Gly Gly Ser
180 185 190

Arg Gly Gly Arg Ile Phe Arg Ser Ser Asp Phe Ala Lys Asn Phe Val
195 200 205

Gln Thr Asp Leu Pro Phe His Pro Leu Thr Gln Met Met Tyr Ser Pro
210 215 220

Gln Asn Ser Asp Tyr Leu Leu Ala Leu Ser Thr Glu Asn Gly Leu Trp
225 230 235 240

Val Ser Lys Asn Phe Gly Gly Lys Trp Glu Glu Ile His Lys Ala Val
245 250 255

Cys Leu Ala Lys Trp Gly Ser Asp Asn Thr Ile Phe Phe Thr Thr Tyr
260 265 270

Ala Asn Gly Ser Cys Lys Ala Asp Leu Gly Ala Leu Glu Leu Trp Arg
275 280 285

Thr Ser Asp Leu Gly Lys Ser Phe Lys Thr Ile Gly Val Lys Ile Tyr
290 295 300

Ser Phe Gly Leu Gly Gly Arg Phe Leu Phe Ala Ser Val Met Ala Asp
305 310 315 320

Lys Asp Thr Thr Arg Arg Ile His Val Ser Thr Asp Gln Gly Asp Thr
325 330 335

Trp Ser Met Ala Gln Leu Pro Ser Val Gly Gln Glu Gln Phe Tyr Ser
340 345 350

Ile Leu Ala Ala Asn Asp Asp Met Val Phe Met His Val Asp Glu Pro
355 360 365

Gly Asp Thr Gly Phe Gly Thr Ile Phe Thr Ser Asp Asp Arg Gly Ile
370 375 380

Val Tyr Ser Lys Ser Leu Asp Arg His Leu Tyr Thr Thr Thr Gly Gly
385 390 395 400

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Glu Thr Asp Phe Thr Asn Val Thr Ser Leu Arg Gly Val Tyr Ile Thr
405 410 415

Ser Val Leu Ser Glu Asp Asn Ser Ile Gln Thr Met Ile Thr Phe Asp
420 425 430

Gln Gly Gly Arg Trp Thr His Leu Arg Lys Pro Glu Asn Ser Glu Cys
435 440 445

Asp Ala Thr Ala Lys Asn Lys Asn Glu Cys Ser Leu His Ile His Ala
450 455 460

Ser Tyr Ser Ile Ser Gln Lys Leu Asn Val Pro Met Ala Pro Leu Ser
465 470 475 480

Glu Pro Asn Ala Val Gly Ile Val Ile Ala His Gly Ser Val Gly Asp
485 490 495

Ala Ile Ser Val Met Val Pro Asp Val Tyr Ile Ser Asp Asp Gly Gly
500 505 510

Tyr Ser Trp Thr Lys Met Leu Glu Gly Pro His Tyr Tyr Thr Ile Leu
515 520 525

Asp Ser Gly Gly Ile Ile Val Ala Ile Glu His Ser Ser Arg Pro Ile
530 535 540

Asn Val Ile Lys Phe Ser Thr Asp Glu Gly Gln Cys Trp Gln Thr Tyr
545 550 555 560

Thr Phe Thr Arg Asp Pro Ile Tyr Phe Thr Gly Leu Ala Ser Glu Pro
565 570 575

Gly Ala Arg Ser Met Asn Ile Ser Ile Trp Gly Phe Thr Glu Ser Phe
580 585 590

Leu Thr Ser Gln Trp Val Ser Tyr Thr Ile Asp Phe Lys Asp Ile Leu
595 600 605

Glu Arg Asn Cys Glu Glu Lys Asp Tyr Thr Ile Trp Leu Ala His Ser
610 615 620

Thr Asp Pro Glu Asp Tyr Glu Asp Gly Cys Ile Leu Gly Tyr Lys Glu
625 630 635 640

Gln Phe Leu Arg Leu Arg Lys Ser Ser Met Cys Gln Asn Gly Arg Asp
645 650 655

Tyr Val Val Thr Lys Gln Pro Ser Ile Cys Leu Cys Ser Leu Glu Asp
660 665 670

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Phe Leu Cys Asp Phe Gly Tyr Tyr Arg Pro Glu Asn Asp Ser Lys Cys
675 680 685

Val Glu Gln Pro Glu Leu Lys Gly His Asp Leu Glu Phe Cys Leu Tyr
690 695 700

Gly Arg Glu Glu His Leu Thr Thr Asn Gly Tyr Arg Lys Ile Pro Gly
705 710 715 720

Asp Lys Cys Gln Gly Gly Val Asn Pro Val Arg Glu Val Lys Asp Leu
725 730 735

Lys Lys Lys Cys Thr Ser Asn Phe Leu Ser Pro Glu Lys Gln Asn Ser
740 745 750

Lys Ser Asn Ser Val Pro Ile Ile Leu Ala Ile Val Gly Leu Met Leu
755 760 765

Val Thr Val Val Ala Gly Val Leu Ile Val Lys Lys Tyr Val Cys Gly
770 775 780

Gly Arg Phe Leu Val His Arg Tyr Ser Val Leu Gln Gln His Ala Glu
785 790 795 800

Ala Asn Gly Val Asp Gly Val Asp Ala Leu Asp Thr Ala Ser His Thr
805 810 815

Asn Lys Ser Gly Tyr His Asp Asp Ser Asp Glu Asp Leu Leu Glu
820 825 830

<210> 2

<211> 2214

<212> PRT

<213> Homo sapiens

<400> 2

Met Ala Thr Arg Ser Ser Arg Arg Glu Ser Arg Leu Pro Phe Leu Phe
1 5 10 15

Thr Leu Val Ala Leu Leu Pro Pro Gly Ala Leu Cys Glu Val Trp Thr
20 25 30

Gln Arg Leu His Gly Gly Ser Ala Pro Leu Pro Gln Asp Arg Gly Phe
35 40 45

Leu Val Val Gln Gly Asp Pro Arg Glu Leu Arg Leu Trp Ala Arg Gly
50 55 60

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Asp Ala Arg Gly Ala Ser Arg Ala Asp Glu Lys Pro Leu Arg Arg Lys
 65 70 75 80
 Arg Ser Ala Ala Leu Gln Pro Glu Pro Ile Lys Val Tyr Gly Gln Val
 85 90 95
 Ser Leu Asn Asp Ser His Asn Gln Met Val Val His Trp Ala Gly Glu
 100 105 110
 Lys Ser Asn Val Ile Val Ala Leu Ala Arg Asp Ser Leu Ala Leu Ala
 115 120 125
 Arg Pro Lys Ser Ser Asp Val Tyr Val Ser Tyr Asp Tyr Gly Lys Ser
 130 135 140
 Phe Lys Lys Ile Ser Asp Lys Leu Asn Phe Gly Leu Gly Asn Arg Ser
 145 150 155 160
 Glu Ala Val Ile Ala Gln Phe Tyr His Ser Pro Ala Asp Asn Lys Arg
 165 170 175
 Tyr Ile Phe Ala Asp Ala Tyr Ala Gln Tyr Leu Trp Ile Thr Phe Asp
 180 185 190
 Phe Cys Asn Thr Leu Gln Gly Phe Ser Ile Pro Phe Arg Ala Ala Asp
 195 200 205
 Leu Leu Leu His Ser Lys Ala Ser Asn Leu Leu Leu Gly Phe Asp Arg
 210 215 220
 Ser His Pro Asn Lys Gln Leu Trp Lys Ser Asp Asp Phe Gly Gln Thr
 225 230 235 240
 Trp Ile Met Ile Gln Glu His Val Lys Ser Phe Ser Trp Gly Ile Asp
 245 250 255
 Pro Tyr Asp Lys Pro Asn Thr Ile Tyr Ile Glu Arg His Glu Pro Ser
 260 265 270
 Gly Tyr Ser Thr Val Phe Arg Ser Thr Asp Phe Phe Gln Ser Arg Glu
 275 280 285
 Asn Gln Glu Val Ile Leu Glu Glu Val Arg Asp Phe Gln Leu Arg Asp
 290 295 300
 Lys Tyr Met Phe Ala Thr Lys Val Val His Leu Leu Gly Ser Glu Gln
 305 310 315 320
 Gln Ser Ser Val Gln Leu Trp Val Ser Phe Gly Arg Lys Pro Met Arg
 325 330 335

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Ala Ala Gln Phe Val Thr Arg His Pro Ile Asn Glu Tyr Tyr Ile Ala
340 345 350

Asp Ala Ser Glu Asp Gln Val Phe Val Cys Val Ser His Ser Asn Asn
355 360 365

Arg Thr Asn Leu Tyr Ile Ser Glu Ala Glu Gly Leu Lys Phe Ser Leu
370 375 380

Ser Leu Glu Asn Val Leu Tyr Tyr Ser Pro Gly Gly Ala Gly Ser Asp
385 390 395 400

Thr Leu Val Arg Tyr Phe Ala Asn Glu Pro Phe Ala Asp Phe His Arg
405 410 415

Val Glu Gly Leu Gln Gly Val Tyr Ile Ala Thr Leu Ile Asn Gly Ser
420 425 430

Met Asn Glu Glu Asn Met Arg Ser Val Ile Thr Phe Asp Lys Gly Gly
435 440 445

Thr Trp Glu Phe Leu Gln Ala Pro Ala Phe Thr Gly Tyr Gly Glu Lys
450 455 460

Ile Asn Cys Glu Leu Ser Gln Gly Cys Ser Leu His Leu Ala Gln Arg
465 470 475 480

Leu Ser Gln Leu Leu Asn Leu Gln Leu Arg Arg Met Pro Ile Leu Ser
485 490 495

Lys Glu Ser Ala Pro Gly Leu Ile Ile Ala Thr Gly Ser Val Gly Lys
500 505 510

Asn Leu Ala Ser Lys Thr Asn Val Tyr Ile Ser Ser Ser Ala Gly Ala
515 520 525

Arg Trp Arg Glu Ala Leu Pro Gly Pro His Tyr Tyr Thr Trp Gly Asp
530 535 540

His Gly Gly Ile Ile Thr Ala Ile Ala Gln Gly Met Glu Thr Asn Glu
545 550 555 560

Leu Lys Tyr Ser Thr Asn Glu Gly Glu Thr Trp Lys Thr Phe Ile Phe
565 570 575

Ser Glu Lys Pro Val Phe Val Tyr Gly Leu Leu Thr Glu Pro Gly Glu
580 585 590

Lys Ser Thr Val Phe Thr Ile Phe Gly Ser Asn Lys Glu Asn Val His
595 600 605

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Ser Trp Leu Ile Leu Gln Val Asn Ala Thr Asp Ala Leu Gly Val Pro
610 615 620

Cys Thr Glu Asn Asp Tyr Lys Leu Trp Ser Pro Ser Asp Glu Arg Gly
625 630 635 640

Asn Glu Cys Leu Leu Gly His Lys Thr Val Phe Lys Arg Arg Thr Pro
645 650 655

His Ala Thr Cys Phe Asn Gly Glu Asp Phe Asp Arg Pro Val Val Val
660 665 670

Ser Asn Cys Ser Cys Thr Arg Glu Asp Tyr Glu Cys Asp Phe Gly Phe
675 680 685

Lys Met Ser Glu Asp Leu Ser Leu Glu Val Cys Val Pro Asp Pro Glu
690 695 700

Phe Ser Gly Lys Ser Tyr Ser Pro Pro Val Pro Cys Pro Val Gly Ser
705 710 715 720

Thr Tyr Arg Arg Thr Arg Gly Tyr Arg Lys Ile Ser Gly Asp Thr Cys
725 730 735

Ser Gly Gly Asp Val Glu Ala Arg Leu Glu Gly Glu Leu Val Pro Cys
740 745 750

Pro Leu Ala Glu Glu Asn Glu Phe Ile Leu Tyr Ala Val Arg Lys Ser
755 760 765

Ile Tyr Arg Tyr Asp Leu Ala Ser Gly Ala Thr Glu Gln Leu Pro Leu
770 775 780

Thr Gly Leu Arg Ala Ala Val Ala Leu Asp Phe Asp Tyr Glu His Asn
785 790 795 800

Cys Leu Tyr Trp Ser Asp Leu Ala Leu Asp Val Ile Gln Arg Leu Cys
805 810 815

Leu Asn Gly Ser Thr Gly Gln Glu Val Ile Ile Asn Ser Gly Leu Glu
820 825 830

Thr Val Glu Ala Leu Ala Phe Glu Pro Leu Ser Gln Leu Leu Tyr Trp
835 840 845

Val Asp Ala Gly Phe Lys Lys Ile Glu Val Ala Asn Pro Asp Gly Asp
850 855 860

Phe Arg Leu Thr Ile Val Asn Ser Ser Val Leu Asp Arg Pro Arg Ala
865 870 875 880

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Leu Val Leu Val Pro Gln Glu Gly Val Met Phe Trp Thr Asp Trp Gly
885 890 895

Asp Leu Lys Pro Gly Ile Tyr Arg Ser Asn Met Asp Gly Ser Ala Ala
900 905 910

Tyr His Leu Val Ser Glu Asp Val Lys Trp Pro Asn Gly Ile Ser Val
915 920 925

Asp Asp Gln Trp Ile Tyr Trp Thr Asp Ala Tyr Leu Glu Cys Ile Glu
930 935 940

Arg Ile Thr Phe Ser Gly Gln Gln Arg Ser Val Ile Leu Asp Asn Leu
945 950 955 960

Pro His Pro Tyr Ala Ile Ala Val Phe Lys Asn Glu Ile Tyr Trp Asp
965 970 975

Asp Trp Ser Gln Leu Ser Ile Phe Arg Ala Ser Lys Tyr Ser Gly Ser
980 985 990

Gln Met Glu Ile Leu Ala Asn Gln Leu Thr Gly Leu Met Asp Met Lys
995 1000 1005

Ile Phe Tyr Lys Gly Lys Asn Thr Gly Ser Asn Ala Cys Val Pro
1010 1015 1020

Arg Pro Cys Ser Leu Leu Cys Leu Pro Lys Ala Asn Asn Ser Arg
1025 1030 1035

Ser Cys Arg Cys Pro Glu Asp Val Ser Ser Ser Val Leu Pro Ser
1040 1045 1050

Gly Asp Leu Met Cys Asp Cys Pro Gln Gly Tyr Gln Leu Lys Asn
1055 1060 1065

Asn Thr Cys Val Lys Glu Glu Asn Thr Cys Leu Arg Asn Gln Tyr
1070 1075 1080

Arg Cys Ser Asn Gly Asn Cys Ile Asn Ser Ile Trp Trp Cys Asp
1085 1090 1095

Phe Asp Asn Asp Cys Gly Asp Met Ser Asp Glu Arg Asn Cys Pro
1100 1105 1110

Thr Thr Ile Cys Asp Leu Asp Thr Gln Phe Arg Cys Gln Glu Ser
1115 1120 1125

Gly Thr Cys Ile Pro Leu Ser Tyr Lys Cys Asp Leu Glu Asp Asp
1130 1135 1140

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Cys	Gly	Asp	Asn	Ser	Asp	Glu	Ser	His	Cys	Glu	Met	His	Gln	Cys
1145						1150					1155			
Arg	Ser	Asp	Glu	Tyr	Asn	Cys	Ser	Ser	Gly	Met	Cys	Ile	Arg	Ser
1160						1165					1170			
Ser	Trp	Val	Cys	Asp	Gly	Asp	Asn	Asp	Cys	Arg	Asp	Trp	Ser	Asp
1175						1180					1185			
Glu	Ala	Asn	Cys	Thr	Ala	Ile	Tyr	His	Thr	Cys	Glu	Ala	Ser	Asn
1190						1195					1200			
Phe	Gln	Cys	Arg	Asn	Gly	His	Cys	Ile	Pro	Gln	Arg	Trp	Ala	Cys
1205						1210					1215			
Asp	Gly	Asp	Thr	Asp	Cys	Gln	Asp	Gly	Ser	Asp	Glu	Asp	Pro	Val
1220						1225					1230			
Asn	Cys	Glu	Lys	Lys	Cys	Asn	Gly	Phe	Arg	Cys	Pro	Asn	Gly	Thr
1235						1240					1245			
Cys	Ile	Pro	Ser	Ser	Lys	His	Cys	Asp	Gly	Leu	Arg	Asp	Cys	Ser
1250						1255					1260			
Asp	Gly	Ser	Asp	Glu	Gln	His	Cys	Glu	Pro	Leu	Cys	Thr	His	Phe
1265						1270					1275			
Met	Asp	Phe	Val	Cys	Lys	Asn	Arg	Gln	Gln	Cys	Leu	Phe	His	Ser
1280						1285					1290			
Met	Val	Cys	Asp	Gly	Ile	Ile	Gln	Cys	Arg	Asp	Gly	Ser	Asp	Glu
1295						1300					1305			
Asp	Ala	Ala	Phe	Ala	Gly	Cys	Ser	Gln	Asp	Pro	Glu	Phe	His	Lys
1310						1315					1320			
Val	Cys	Asp	Glu	Phe	Gly	Phe	Gln	Cys	Gln	Asn	Gly	Val	Cys	Ile
1325						1330					1335			
Ser	Leu	Ile	Trp	Lys	Cys	Asp	Gly	Met	Asp	Asp	Cys	Gly	Asp	Tyr
1340						1345					1350			
Ser	Asp	Glu	Ala	Asn	Cys	Glu	Asn	Pro	Thr	Glu	Ala	Pro	Asn	Cys
1355						1360					1365			
Ser	Arg	Tyr	Phe	Gln	Phe	Arg	Cys	Glu	Asn	Gly	His	Cys	Ile	Pro
1370						1375					1380			
Asn	Arg	Trp	Lys	Cys	Asp	Arg	Glu	Asn	Asp	Cys	Gly	Asp	Trp	Ser
1385						1390					1395			

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Asp Glu	Lys Asp Cys Gly	Asp	Ser His Ile Leu Pro	Phe Ser Thr
1400		1405		1410
Pro Gly	Pro Ser Thr Cys	Leu	Pro Asn Tyr Tyr	Arg Cys Ser Ser
1415		1420		1425
Gly Thr	Cys Val Met Asp	Thr	Trp Val Cys Asp	Gly Tyr Arg Asp
1430		1435		1440
Cys Ala	Asp Gly Ser Asp	Glu	Glu Ala Cys Pro	Leu Leu Ala Asn
1445		1450		1455
Val Thr	Ala Ala Ser Thr	Pro	Thr Gln Leu Gly	Arg Cys Asp Arg
1460		1465		1470
Phe Glu	Phe Glu Cys His	Gln	Pro Lys Thr Cys	Ile Pro Asn Trp
1475		1480		1485
Lys Arg	Cys Asp Gly His	Gln	Asp Cys Gln Asp	Gly Arg Asp Glu
1490		1495		1500
Ala Asn	Cys Pro Thr His	Ser	Thr Leu Thr Cys	Met Ser Arg Glu
1505		1510		1515
Phe Gln	Cys Glu Asp Gly	Glu	Ala Cys Ile Val	Leu Ser Glu Arg
1520		1525		1530
Cys Asp	Gly Phe Leu Asp	Cys	Ser Asp Glu Ser	Asp Glu Lys Ala
1535		1540		1545
Cys Ser	Asp Glu Leu Thr	Val	Tyr Lys Val Gln	Asn Leu Gln Trp
1550		1555		1560
Thr Ala	Asp Phe Ser Gly	Asp	Val Thr Leu Thr	Trp Met Arg Pro
1565		1570		1575
Lys Lys	Met Pro Ser Ala	Ser	Cys Val Tyr Asn	Val Tyr Tyr Arg
1580		1585		1590
Val Val	Gly Glu Ser Ile	Trp	Lys Thr Leu Glu	Thr His Ser Asn
1595		1600		1605
Lys Thr	Asn Thr Val Leu	Lys	Val Leu Lys Pro	Asp Thr Thr Tyr
1610		1615		1620
Gln Val	Lys Val Gln Val	Gln	Cys Leu Ser Lys	Ala His Asn Thr
1625		1630		1635
Asn Asp	Phe Val Thr Leu	Arg	Thr Pro Glu Gly	Leu Pro Asp Ala
1640		1645		1650

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Pro Arg Asn Leu Gln Leu Ser Leu Pro Arg Glu Ala Glu Gly Val
1655 1660 1665

Ile Val Gly His Trp Ala Pro Pro Ile His Thr His Gly Leu Ile
1670 1675 1680

Arg Glu Tyr Ile Val Glu Tyr Ser Arg Ser Gly Ser Lys Met Trp
1685 1690 1695

Ala Ser Gln Arg Ala Ala Ser Asn Phe Thr Glu Ile Lys Asn Leu
1700 1705 1710

Leu Val Asn Thr Leu Tyr Thr Val Arg Val Ala Ala Val Thr Ser
1715 1720 1725

Arg Gly Ile Gly Asn Trp Ser Asp Ser Lys Ser Ile Thr Thr Ile
1730 1735 1740

Lys Gly Lys Val Ile Pro Pro Pro Asp Ile His Ile Asp Ser Tyr
1745 1750 1755

Gly Glu Asn Tyr Leu Ser Phe Thr Leu Thr Met Glu Ser Asp Ile
1760 1765 1770

Lys Val Asn Gly Tyr Val Val Asn Leu Phe Trp Ala Phe Asp Thr
1775 1780 1785

His Lys Gln Glu Arg Arg Thr Leu Asn Phe Arg Gly Ser Ile Leu
1790 1795 1800

Ser His Lys Val Gly Asn Leu Thr Ala His Thr Ser Tyr Glu Ile
1805 1810 1815

Ser Ala Trp Ala Lys Thr Asp Leu Gly Asp Ser Pro Leu Ala Phe
1820 1825 1830

Glu His Val Met Thr Arg Gly Val Arg Pro Pro Ala Pro Ser Leu
1835 1840 1845

Lys Ala Lys Ala Ile Asn Gln Thr Ala Val Glu Cys Thr Trp Thr
1850 1855 1860

Gly Pro Arg Asn Val Val Tyr Gly Ile Phe Tyr Ala Thr Ser Phe
1865 1870 1875

Leu Asp Leu Tyr Arg Asn Pro Lys Ser Leu Thr Thr Ser Leu His
1880 1885 1890

Asn Lys Thr Val Ile Val Ser Lys Asp Glu Gln Tyr Leu Phe Leu
1895 1900 1905

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Val	Arg	Val	Val	Val	Pro	Tyr	Gln	Gly	Pro	Ser	Ser	Asp	Tyr	Val
1910						1915						1920		
Val	Val	Lys	Met	Ile	Pro	Asp	Ser	Arg	Leu	Pro	Pro	Arg	His	Leu
1925						1930					1935			
His	Val	Val	His	Thr	Gly	Lys	Thr	Ser	Val	Val	Ile	Lys	Trp	Glu
1940						1945					1950			
Ser	Pro	Tyr	Asp	Ser	Pro	Asp	Gln	Asp	Leu	Leu	Tyr	Ala	Ile	Ala
1955						1960					1965			
Val	Lys	Asp	Leu	Ile	Arg	Lys	Thr	Asp	Arg	Ser	Tyr	Lys	Val	Lys
1970						1975					1980			
Ser	Arg	Asn	Ser	Thr	Val	Glu	Tyr	Thr	Leu	Asn	Lys	Leu	Glu	Pro
1985						1990					1995			
Gly	Gly	Lys	Tyr	His	Ile	Ile	Val	Gln	Leu	Gly	Asn	Met	Ser	Lys
2000						2005					2010			
Asp	Ser	Ser	Ile	Lys	Ile	Thr	Thr	Val	Ser	Leu	Ser	Ala	Pro	Asp
2015						2020					2025			
Ala	Leu	Lys	Ile	Ile	Thr	Glu	Asn	Asp	His	Val	Leu	Leu	Phe	Trp
2030						2035					2040			
Lys	Ser	Leu	Ala	Leu	Lys	Glu	Lys	His	Phe	Asn	Glu	Ser	Arg	Gly
2045						2050					2055			
Tyr	Glu	Ile	His	Met	Phe	Asp	Ser	Ala	Met	Asn	Ile	Thr	Ala	Tyr
2060						2065					2070			
Leu	Gly	Asn	Thr	Thr	Asp	Asn	Phe	Phe	Lys	Ile	Ser	Asn	Leu	Lys
2075						2080					2085			
Met	Gly	His	Asn	Tyr	Thr	Phe	Thr	Val	Gln	Ala	Arg	Cys	Leu	Phe
2090						2095					2100			
Gly	Asn	Gln	Ile	Cys	Gly	Glu	Pro	Ala	Ile	Leu	Leu	Tyr	Asp	Glu
2105						2110					2115			
Leu	Gly	Ser	Gly	Ala	Asp	Ala	Ser	Ala	Thr	Gln	Ala	Ala	Arg	Ser
2120						2125					2130			
Thr	Asp	Val	Ala	Ala	Val	Val	Val	Pro	Ile	Leu	Phe	Leu	Ile	Leu
2135						2140					2145			
Leu	Ser	Leu	Gly	Val	Gly	Phe	Ala	Ile	Leu	Tyr	Thr	Lys	His	Arg
2150						2155					2160			

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Arg Leu Gln Ser Ser Phe Thr Ala Phe Ala Asn Ser His Tyr Ser
2165 2170 2175

Ser Arg Leu Gly Ser Ala Ile Phe Ser Ser Gly Asp Asp Leu Gly
2180 2185 2190

Glu Asp Asp Glu Asp Ala Pro Met Ile Thr Gly Phe Ser Asp Asp
2195 2200 2205

Val Pro Met Val Ile Ala
2210

<210> 3

<211> 1168

<212> PRT

<213> Homo sapiens

<400> 3

Met Gly Lys Val Gly Ala Gly Gly Gly Ser Gln Ala Arg Leu Ser Ala
1 5 10 15

Leu Leu Ala Gly Ala Gly Leu Leu Ile Leu Cys Ala Pro Gly Val Cys
20 25 30

Gly Gly Gly Ser Cys Cys Pro Ser Pro His Pro Ser Ser Ala Pro Arg
35 40 45

Ser Ala Ser Thr Pro Arg Gly Phe Ser His Gln Gly Arg Pro Gly Arg
50 55 60

Ala Pro Ala Thr Pro Leu Pro Leu Val Val Arg Pro Leu Phe Ser Val
65 70 75 80

Ala Pro Gly Asp Arg Ala Leu Ser Leu Glu Arg Ala Arg Gly Thr Gly
85 90 95

Ala Ser Met Ala Val Ala Ala Arg Ser Gly Arg Arg Arg Arg Ser Gly
100 105 110

Ala Asp Gln Glu Lys Ala Glu Arg Gly Glu Gly Ala Ser Arg Ser Pro
115 120 125

Arg Gly Val Leu Arg Asp Gly Gly Gln Gln Glu Pro Gly Thr Arg Glu
130 135 140

Arg Asp Pro Asp Lys Ala Thr Arg Phe Arg Met Glu Glu Leu Arg Leu
145 150 155 160

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Thr Ser Thr Thr Phe Ala Leu Thr Gly Asp Ser Ala His Asn Gln Ala
165 170 175

Met Val His Trp Ser Gly His Asn Ser Ser Val Ile Leu Ile Leu Thr
180 185 190

Lys Leu Tyr Asp Tyr Asn Leu Gly Ser Ile Thr Glu Ser Ser Leu Trp
195 200 205

Arg Ser Thr Asp Tyr Gly Thr Thr Tyr Glu Lys Leu Asn Asp Lys Val
210 215 220

Gly Leu Lys Thr Ile Leu Gly Tyr Leu Tyr Val Cys Pro Thr Asn Lys
225 230 235 240

Arg Lys Ile Met Leu Leu Thr Asp Pro Glu Ile Glu Ser Ser Leu Leu
245 250 255

Ile Ser Ser Asp Glu Gly Ala Thr Tyr Gln Lys Tyr Arg Leu Asn Phe
260 265 270

Tyr Ile Gln Ser Leu Leu Phe His Pro Lys Gln Glu Asp Trp Ile Leu
275 280 285

Ala Tyr Ser Gln Asp Gln Lys Leu Tyr Ser Ser Ala Glu Phe Gly Arg
290 295 300

Arg Trp Gln Leu Ile Gln Glu Gly Val Val Pro Asn Arg Phe Tyr Trp
305 310 315 320

Ser Val Met Gly Ser Asn Lys Glu Pro Asp Leu Val His Leu Glu Ala
325 330 335

Arg Thr Val Asp Gly His Ser His Tyr Leu Thr Cys Arg Met Gln Asn
340 345 350

Cys Thr Glu Ala Asn Arg Asn Gln Pro Phe Pro Gly Tyr Ile Asp Pro
355 360 365

Asp Ser Leu Ile Val Gln Asp His Tyr Val Phe Val Gln Leu Thr Ser
370 375 380

Gly Gly Arg Pro His Tyr Tyr Val Ser Tyr Arg Arg Asn Ala Phe Ala
385 390 395 400

Gln Met Lys Leu Pro Lys Tyr Ala Leu Pro Lys Asp Met His Val Ile
405 410 415

Ser Thr Asp Glu Asn Gln Val Phe Ala Ala Val Gln Glu Trp Asn Gln
420 425 430

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Asn Asp Thr Tyr Asn Leu Tyr Ile Ser Asp Thr Arg Gly Val Tyr Phe
435 440 445

Thr Leu Ala Leu Glu Asn Val Gln Ser Ser Arg Gly Pro Glu Gly Asn
450 455 460

Ile Met Ile Asp Leu Tyr Glu Val Ala Gly Ile Lys Gly Met Phe Leu
465 470 475 480

Ala Asn Lys Lys Ile Asp Tyr Gln Val Lys Thr Phe Ile Thr Tyr Asn
485 490 495

Lys Gly Arg Asp Trp Arg Leu Leu Gln Ala Pro Asp Thr Asp Leu Arg
500 505 510

Gly Asp Pro Val His Cys Leu Leu Pro Tyr Cys Ser Leu His Leu His
515 520 525

Leu Lys Val Ser Glu Asn Pro Tyr Thr Ser Gly Ile Ile Ala Ser Lys
530 535 540

Asp Thr Ala Pro Ser Ile Ile Val Ala Ser Gly Asn Ile Gly Ser Glu
545 550 555 560

Leu Ser Asp Thr Asp Ile Ser Met Phe Val Ser Ser Asp Ala Gly Asn
565 570 575

Thr Trp Arg Gln Ile Phe Glu Glu Glu His Ser Val Leu Tyr Leu Asp
580 585 590

Gln Gly Gly Val Leu Val Ala Met Lys His Thr Ser Leu Pro Ile Arg
595 600 605

His Leu Trp Leu Ser Phe Asp Glu Gly Arg Ser Trp Ser Lys Tyr Ser
610 615 620

Phe Thr Ser Ile Pro Leu Phe Val Asp Gly Val Leu Gly Glu Pro Gly
625 630 635 640

Glu Glu Thr Leu Ile Met Thr Val Phe Gly His Phe Ser His Arg Ser
645 650 655

Glu Trp Gln Leu Val Lys Val Asp Tyr Lys Ser Ile Phe Asp Arg Arg
660 665 670

Cys Ala Glu Glu Asp Tyr Arg Pro Trp Gln Leu His Ser Gln Gly Glu
675 680 685

Ala Cys Ile Met Gly Ala Lys Arg Ile Tyr Lys Lys Arg Lys Ser Glu
690 695 700

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Arg Lys Cys Met Gln Gly Lys Tyr Ala Gly Ala Met Glu Ser Glu Pro
 705 710 715 720
 Cys Val Cys Thr Glu Ala Asp Phe Asp Cys Asp Tyr Gly Tyr Glu Arg
 725 730 735
 His Ser Asn Gly Gln Cys Leu Pro Ala Phe Trp Phe Asn Pro Ser Ser
 740 745 750
 Leu Ser Lys Asp Cys Ser Leu Gly Gln Ser Tyr Leu Asn Ser Thr Gly
 755 760 765
 Tyr Arg Lys Val Val Ser Asn Asn Cys Thr Asp Gly Val Arg Glu Gln
 770 775 780
 Tyr Thr Ala Lys Pro Gln Lys Cys Pro Gly Lys Ala Pro Arg Gly Leu
 785 790 795 800
 Arg Ile Val Thr Ala Asp Gly Lys Leu Thr Ala Glu Gln Gly His Asn
 805 810 815
 Val Thr Leu Met Val Gln Leu Glu Glu Gly Asp Val Gln Arg Thr Leu
 820 825 830
 Ile Gln Val Asp Phe Gly Asp Gly Ile Ala Val Ser Tyr Val Asn Leu
 835 840 845
 Ser Ser Met Glu Asp Gly Ile Lys His Val Tyr Gln Asn Val Gly Ile
 850 855 860
 Phe Arg Val Thr Val Gln Val Asp Asn Ser Leu Gly Ser Asp Ser Ala
 865 870 875 880
 Val Leu Tyr Leu His Val Thr Cys Pro Leu Glu His Val His Leu Ser
 885 890 895
 Leu Pro Phe Val Thr Thr Lys Asn Lys Glu Val Asn Ala Thr Ala Val
 900 905 910
 Leu Trp Pro Ser Gln Val Gly Thr Leu Thr Tyr Val Trp Trp Tyr Gly
 915 920 925
 Asn Asn Thr Glu Pro Leu Ile Thr Leu Glu Gly Ser Ile Ser Phe Arg
 930 935 940
 Phe Thr Ser Glu Gly Met Asn Thr Ile Thr Val Gln Val Ser Ala Gly
 945 950 955 960
 Asn Ala Ile Leu Gln Asp Thr Lys Thr Ile Ala Val Tyr Glu Glu Phe
 965 970 975

SequenceListing ST25.txt

Arg Ser Leu Arg Leu Ser Phe Ser Pro Asn Leu Asp Asp Tyr Asn Pro
980 985 990

Asp Ile Pro Glu Trp Arg Arg Asp Ile Gly Arg Val Ile Lys Lys Ser
995 1000 1005

Leu Val Glu Ala Thr Gly Val Pro Gly Gln His Ile Leu Val Ala
1010 1015 1020

Val Leu Pro Gly Leu Pro Thr Thr Ala Glu Leu Phe Val Leu Pro
1025 1030 1035

Tyr Gln Asp Pro Ala Gly Glu Asn Lys Arg Ser Thr Asp Asp Leu
1040 1045 1050

Glu Gln Ile Ser Glu Leu Leu Ile His Thr Leu Asn Gln Asn Ser
1055 1060 1065

Val His Phe Glu Leu Lys Pro Gly Val Arg Val Leu Val His Ala
1070 1075 1080

Ala His Leu Thr Ala Ala Pro Leu Val Asp Leu Thr Pro Thr His
1085 1090 1095

Ser Gly Ser Ala Met Leu Met Leu Leu Ser Val Val Phe Val Gly
1100 1105 1110

Leu Ala Val Phe Val Ile Tyr Lys Phe Lys Arg Arg Val Ala Leu
1115 1120 1125

Pro Ser Pro Pro Ser Pro Ser Thr Gln Pro Gly Asp Ser Ser Leu
1130 1135 1140

Arg Leu Gln Arg Ala Arg His Ala Thr Pro Pro Ser Thr Pro Lys
1145 1150 1155

Arg Gly Ser Ala Gly Ala Gln Tyr Ala Ile
1160 1165

<210> 4

<211> 1222

<212> PRT

<213> Homo sapiens

<400> 4

Met Glu Ala Ala Arg Thr Glu Arg Pro Ala Gly Arg Pro Gly Ala Pro
1 5 10 15

SequenceListing ST25.txt

Leu Val Arg Thr Gly Leu Leu Leu Leu Ser Thr Trp Val Leu Ala Gly
 20 25 30
 Ala Glu Ile Thr Trp Asp Ala Thr Gly Gly Pro Gly Arg Pro Ala Ala
 35 40 45
 Pro Ala Ser Arg Pro Pro Ala Leu Ser Pro Leu Ser Pro Arg Ala Val
 50 55 60
 Ala Ser Gln Trp Pro Glu Glu Leu Ala Ser Ala Arg Arg Ala Ala Val
 65 70 75 80
 Leu Gly Arg Arg Ala Gly Pro Glu Leu Leu Pro Gln Gln Gly Gly Gly
 85 90 95
 Arg Gly Gly Glu Met Gln Val Glu Ala Gly Gly Thr Ser Pro Ala Gly
 100 105 110
 Glu Arg Arg Gly Arg Gly Ile Pro Ala Pro Ala Lys Leu Gly Gly Ala
 115 120 125
 Arg Arg Ser Arg Arg Ala Gln Pro Pro Ile Thr Gln Glu Arg Gly Asp
 130 135 140
 Ala Trp Ala Thr Ala Pro Ala Asp Gly Ser Arg Gly Ser Arg Pro Leu
 145 150 155 160
 Ala Lys Gly Ser Arg Glu Glu Val Lys Ala Pro Arg Ala Gly Gly Ser
 165 170 175
 Ala Ala Glu Asp Leu Arg Leu Pro Ser Thr Ser Phe Ala Leu Thr Gly
 180 185 190
 Asp Ser Ala His Asn Gln Ala Met Val His Trp Ser Gly His Asn Ser
 195 200 205
 Ser Val Ile Leu Ile Leu Thr Lys Leu Tyr Asp Phe Asn Leu Gly Ser
 210 215 220
 Val Thr Glu Ser Ser Leu Trp Arg Ser Thr Asp Tyr Gly Thr Thr Tyr
 225 230 235 240
 Glu Lys Leu Asn Asp Lys Val Gly Leu Lys Thr Val Leu Ser Tyr Leu
 245 250 255
 Tyr Val Asn Pro Thr Asn Lys Arg Lys Ile Met Leu Leu Ser Asp Pro
 260 265 270
 Glu Met Glu Ser Ser Ile Leu Ile Ser Ser Asp Glu Gly Ala Thr Tyr
 275 280 285

SequenceListing ST25.txt

Gln Lys Tyr Arg Leu Thr Phe Tyr Ile Gln Ser Leu Leu Phe His Pro
290 295 300

Lys Gln Glu Asp Trp Val Leu Ala Tyr Ser Leu Asp Gln Lys Leu Tyr
305 310 315 320

Ser Ser Met Asp Phe Gly Arg Arg Trp Gln Leu Met His Glu Arg Ile
325 330 335

Thr Pro Asn Arg Phe Tyr Trp Ser Val Ala Gly Leu Asp Lys Glu Ala
340 345 350

Asp Leu Val His Met Glu Val Arg Thr Thr Asp Gly Tyr Ala His Tyr
355 360 365

Leu Thr Cys Arg Ile Gln Glu Cys Ala Glu Thr Thr Arg Ser Gly Pro
370 375 380

Phe Ala Arg Ser Ile Asp Ile Ser Ser Leu Val Val Gln Asp Glu Tyr
385 390 395 400

Ile Phe Ile Gln Val Thr Thr Ser Gly Arg Ala Ser Tyr Tyr Val Ser
405 410 415

Tyr Arg Arg Glu Ala Phe Ala Gln Ile Lys Leu Pro Lys Tyr Ser Leu
420 425 430

Pro Lys Asp Met His Ile Ile Ser Thr Asp Glu Asn Gln Val Phe Ala
435 440 445

Ala Val Gln Glu Trp Asn Gln Asn Asp Thr Tyr Asn Leu Tyr Ile Ser
450 455 460

Asp Thr Arg Gly Ile Tyr Phe Thr Leu Ala Met Glu Asn Ile Lys Ser
465 470 475 480

Ser Arg Gly Leu Met Gly Asn Ile Ile Ile Glu Leu Tyr Glu Val Ala
485 490 495

Gly Ile Lys Gly Ile Phe Leu Ala Asn Lys Lys Val Asp Asp Gln Val
500 505 510

Lys Thr Tyr Ile Thr Tyr Asn Lys Gly Arg Asp Trp Arg Leu Leu Gln
515 520 525

Ala Pro Asp Val Asp Leu Arg Gly Ser Pro Val His Cys Leu Leu Pro
530 535 540

Phe Cys Ser Leu His Leu His Leu Gln Leu Ser Glu Asn Pro Tyr Ser
545 550 555 560

SequenceListing ST25.txt

Ser Gly Arg Ile Ser Ser Lys Glu Thr Ala Pro Gly Leu Val Val Ala
565 570 575

Thr Gly Asn Ile Gly Pro Glu Leu Ser Tyr Thr Asp Ile Gly Val Phe
580 585 590

Ile Ser Ser Asp Gly Gly Asn Thr Trp Arg Gln Ile Phe Asp Glu Glu
595 600 605

Tyr Asn Val Trp Phe Leu Asp Trp Gly Gly Ala Leu Val Ala Met Lys
610 615 620

His Thr Pro Leu Pro Val Arg His Leu Trp Val Ser Phe Asp Glu Gly
625 630 635 640

His Ser Trp Asp Lys Tyr Gly Phe Thr Ser Val Pro Leu Phe Val Asp
645 650 655

Gly Ala Leu Val Glu Ala Gly Met Glu Thr His Ile Met Thr Val Phe
660 665 670

Gly His Phe Ser Leu Arg Ser Glu Trp Gln Leu Val Lys Val Asp Tyr
675 680 685

Lys Ser Ile Phe Ser Arg His Cys Thr Lys Glu Asp Tyr Gln Thr Trp
690 695 700

His Leu Leu Asn Gln Gly Glu Pro Cys Val Met Gly Glu Arg Lys Ile
705 710 715 720

Phe Lys Lys Arg Lys Pro Gly Ala Gln Cys Ala Leu Gly Arg Asp His
725 730 735

Ser Gly Ser Val Val Ser Glu Pro Cys Val Cys Ala Asn Trp Asp Phe
740 745 750

Glu Cys Asp Tyr Gly Tyr Glu Arg His Gly Glu Ser Gln Cys Val Pro
755 760 765

Ala Phe Trp Tyr Asn Pro Ala Ser Pro Ser Lys Asp Cys Ser Leu Gly
770 775 780

Gln Ser Tyr Leu Asn Ser Thr Gly Tyr Arg Arg Ile Val Ser Asn Asn
785 790 795 800

Cys Thr Asp Gly Leu Arg Glu Lys Tyr Thr Ala Lys Ala Gln Met Cys
805 810 815

Pro Gly Lys Ala Pro Arg Gly Leu His Val Val Thr Thr Asp Gly Arg
820 825 830

SequenceListing ST25.txt

Leu Val Ala Glu Gln Gly His Asn Ala Thr Phe Ile Ile Leu Met Glu
835 840 845

Glu Gly Asp Leu Gln Arg Thr Asn Ile Gln Leu Asp Phe Gly Asp Gly
850 855 860

Ile Ala Val Ser Tyr Ala Asn Phe Ser Pro Ile Glu Asp Gly Ile Lys
865 870 875 880

His Val Tyr Lys Ser Ala Gly Ile Phe Gln Val Thr Ala Tyr Ala Glu
885 890 895

Asn Asn Leu Gly Ser Asp Thr Ala Val Leu Phe Leu His Val Val Cys
900 905 910

Pro Val Glu His Val His Leu Arg Val Pro Phe Val Ala Ile Arg Asn
915 920 925

Lys Glu Val Asn Ile Ser Ala Val Val Trp Pro Ser Gln Leu Gly Thr
930 935 940

Leu Thr Tyr Phe Trp Trp Phe Gly Asn Ser Thr Lys Pro Leu Ile Thr
945 950 955 960

Leu Asp Ser Ser Ile Ser Phe Thr Phe Leu Ala Glu Gly Thr Asp Thr
965 970 975

Ile Thr Val Gln Val Ala Ala Gly Asn Ala Leu Ile Gln Asp Thr Lys
980 985 990

Glu Ile Ala Val His Glu Tyr Phe Gln Ser Gln Leu Leu Ser Phe Ser
995 1000 1005

Pro Asn Leu Asp Tyr His Asn Pro Asp Ile Pro Glu Trp Arg Lys
1010 1015 1020

Asp Ile Gly Asn Val Ile Lys Arg Ala Leu Val Lys Val Thr Ser
1025 1030 1035

Val Pro Glu Asp Gln Ile Leu Ile Ala Val Phe Pro Gly Leu Pro
1040 1045 1050

Thr Ser Ala Glu Leu Phe Ile Leu Pro Pro Lys Asn Leu Thr Glu
1055 1060 1065

Arg Arg Lys Gly Asn Glu Gly Asp Leu Glu Gln Ile Val Glu Thr
1070 1075 1080

Leu Phe Asn Ala Leu Asn Gln Asn Leu Val Gln Phe Glu Leu Lys
1085 1090 1095

SequenceListing ST25.txt

Pro Gly Val Gln Val Ile Val Tyr Val Thr Gln Leu Thr Leu Ala
1100 1105 1110

Pro Leu Val Asp Ser Ser Ala Gly His Ser Ser Ser Ala Met Leu
1115 1120 1125

Met Leu Leu Ser Val Val Phe Val Gly Leu Ala Val Phe Leu Ile
1130 1135 1140

Tyr Lys Phe Lys Arg Lys Ile Pro Trp Ile Asn Ile Tyr Ala Gln
1145 1150 1155

Val Gln His Asp Lys Glu Gln Glu Met Ile Gly Ser Val Ser Gln
1160 1165 1170

Ser Glu Asn Ala Pro Lys Ile Thr Leu Ser Asp Phe Thr Glu Pro
1175 1180 1185

Glu Glu Leu Leu Asp Lys Glu Leu Asp Thr Arg Val Ile Gly Gly
1190 1195 1200

Ile Ala Thr Ile Ala Asn Ser Glu Ser Thr Lys Glu Ile Pro Asn
1205 1210 1215

Cys Thr Ser Val
1220

<210> 5

<211> 907

<212> PRT

<213> Homo sapiens

<400> 5

Leu Ile Phe His Pro Lys Glu Glu Asp Lys Val Leu Ala Tyr Thr Lys
1 5 10 15

Glu Ser Lys Leu Tyr Val Ser Ser Asp Leu Gly Lys Lys Trp Thr Leu
20 25 30

Leu Gln Glu Arg Val Thr Lys Asp His Val Phe Trp Ser Val Ser Gly
35 40 45

Val Asp Ala Asp Pro Asp Leu Val His Val Glu Ala Gln Asp Leu Gly
50 55 60

Gly Asp Phe Arg Tyr Val Thr Cys Ala Ile His Asn Cys Ser Glu Lys
65 70 75 80

SequenceListing.ST25.txt

Met Leu Thr Ala Pro Phe Ala Gly Pro Ile Asp His Gly Ser Leu Thr
85 90

Val Gln Asp Asp Tyr Ile Phe Phe Lys Ala Thr Ser Ala Asn Gln Thr
100 105 110

Lys Tyr Tyr Val Ser Tyr Arg Arg Asn Glu Phe Val Leu Met Lys Leu
115 120 125

Pro Lys Tyr Ala Leu Pro Lys Asp Leu Gln Ile Ile Ser Thr Asp Glu
130 135 140

Ser Gln Val Phe Val Ala Val Gln Glu Trp Tyr Gln Met Asp Thr Tyr
145 150 155 160

Asn Leu Tyr Gln Ser Asp Pro Arg Gly Val Arg Tyr Ala Leu Val Leu
165 170 175

Gln Asp Val Arg Ser Ser Arg Gln Ala Glu Glu Ser Val Leu Ile Asp
180 185 190

Ile Leu Glu Val Arg Gly Val Lys Gly Val Phe Leu Ala Asn Gln Lys
195 200 205

Ile Asp Gly Lys Val Met Thr Leu Ile Thr Tyr Asn Lys Gly Arg Asp
210 215 220

Trp Asp Tyr Leu Arg Pro Pro Ser Met Asp Met Asn Gly Lys Pro Thr
225 230 235 240

Asn Cys Lys Pro Pro Asp Cys His Leu His Leu His Leu Arg Trp Ala
245 250 255

Asp Asn Pro Tyr Val Ser Gly Thr Val His Thr Lys Asp Thr Ala Pro
260 265 270

Gly Leu Ile Met Gly Ala Gly Asn Leu Gly Ser Gln Leu Val Glu Tyr
275 280 285

Lys Glu Glu Met Tyr Ile Thr Ser Asp Cys Gly His Thr Trp Arg Gln
290 295 300

Val Phe Glu Glu Glu His His Ile Leu Tyr Leu Asp His Gly Gly Val
305 310 315 320

Ile Val Ala Ile Lys Asp Thr Ser Ile Pro Leu Lys Ile Leu Lys Phe
325 330 335

Ser Val Asp Glu Gly Leu Thr Trp Ser Thr His Asn Phe Thr Ser Thr
340 345 350

SequenceListing ST25.txt

Ser Val Phe Val Asp Gly Leu Leu Ser Glu Pro Gly Asp Glu Thr Leu
355 360 365

Val Met Thr Val Phe Gly His Ile Ser Phe Arg Ser Asp Trp Glu Leu
370 375 380

Val Lys Val Asp Phe Arg Pro Ser Phe Ser Arg Gln Cys Gly Glu Glu
385 390 395 400

Asp Tyr Ser Ser Trp Glu Leu Ser Asn Leu Gln Gly Asp Arg Cys Ile
405 410 415

Met Gly Gln Gln Arg Ser Phe Arg Lys Arg Lys Ser Thr Ser Trp Cys
420 425 430

Ile Lys Gly Arg Ser Phe Thr Ser Ala Leu Thr Ser Arg Val Cys Glu
435 440 445

Cys Arg Asp Ser Asp Phe Leu Cys Asp Tyr Gly Phe Glu Arg Ser Pro
450 455 460

Ser Ser Glu Ser Ser Thr Asn Lys Cys Ser Ala Asn Phe Trp Phe Asn
465 470 475 480

Pro Leu Ser Pro Pro Asp Asp Cys Ala Leu Gly Gln Thr Tyr Thr Ser
485 490 495

Ser Leu Gly Tyr Arg Lys Val Val Ser Asn Val Cys Glu Gly Gly Val
500 505 510

Asp Met Gln Gln Ser Gln Val Gln Leu Gln Cys Pro Leu Thr Pro Pro
515 520 525

Arg Gly Leu Gln Val Ser Ile Gln Gly Glu Ala Val Ala Val Arg Pro
530 535 540

Gly Glu Asp Val Leu Phe Val Val Arg Gln Glu Gln Gly Asp Val Leu
545 550 555 560

Thr Thr Lys Tyr Gln Val Asp Leu Gly Asp Gly Phe Lys Ala Met Tyr
565 570 575

Val Asn Leu Thr Leu Thr Gly Glu Pro Ile Arg His Arg Tyr Glu Ser
580 585 590

Pro Gly Ile Tyr Arg Val Ser Val Arg Ala Glu Asn Thr Ala Gly His
595 600 605

Asp Glu Ala Val Leu Phe Val Gln Val Asn Ser Pro Leu Gln Ala Leu
610 615 620

SequenceListing ST25.txt

Tyr Leu Glu Val Val Pro Val Ile Gly Leu Asn Gln Glu Val Asn Leu
625 630 635 640

Thr Ala Val Leu Leu Pro Leu Asn Pro Asn Leu Thr Val Phe Tyr Trp
645 650 655

Trp Ile Gly His Ser Leu Gln Pro Leu Leu Ser Leu Asp Asn Ser Val
660 665 670

Thr Thr Arg Phe Ser Asp Thr Gly Asp Val Arg Val Thr Val Gln Ala
675 680 685

Ala Cys Gly Asn Ser Val Leu Gln Asp Ser Arg Val Leu Arg Val Leu
690 695 700

Asp Gln Phe Gln Val Met Pro Leu Gln Phe Ser Lys Glu Leu Asp Ala
705 710 715 720

Tyr Asn Pro Asn Thr Pro Glu Trp Arg Glu Asp Val Gly Leu Val Val
725 730 735

Thr Arg Leu Leu Ser Lys Glu Thr Ser Val Pro Gln Glu Leu Leu Val
740 745 750

Thr Val Val Lys Pro Gly Leu Pro Thr Leu Ala Asp Leu Tyr Val Leu
755 760 765

Leu Pro Pro Pro Arg Pro Thr Arg Lys Arg Ser Leu Ser Ser Asp Lys
770 775 780

Arg Leu Ala Ala Ile Gln Gln Val Leu Asn Ala Gln Lys Ile Ser Phe
785 790 795 800

Leu Leu Arg Gly Gly Val Arg Val Leu Val Ala Leu Arg Asp Thr Gly
805 810 815

Thr Gly Ala Glu Gln Leu Gly Gly Gly Gly Tyr Trp Ala Val Val
820 825 830

Val Leu Phe Val Ile Gly Leu Phe Ala Ala Gly Ala Phe Ile Leu Tyr
835 840 845

Lys Phe Lys Arg Lys Arg Pro Gly Arg Thr Val Tyr Ala Gln Met His
850 855 860

Asn Glu Lys Glu Gln Glu Met Thr Ser Pro Val Ser His Ser Glu Asp
865 870 875 880

Val Gln Gly Ala Val Gln Gly Asn His Ser Gly Val Val Leu Ser Ile
885 890 895

SequenceListing ST25.txt

Asn Ser Arg Glu Met His Ser Tyr Leu Val Ser
900 905

<210> 6

<211> 241

<212> PRT

<213> Homo sapiens

<400> 6

Met Ser Met Leu Phe Tyr Thr Leu Ile Thr Ala Phe Leu Ile Gly Ile
1 5 10 15

Gln Ala Glu Pro His Ser Glu Ser Asn Val Pro Ala Gly His Thr Ile
20 25 30

Pro Gln Val His Trp Thr Lys Leu Gln His Ser Leu Asp Thr Ala Leu
35 40 45

Arg Arg Ala Arg Ser Ala Pro Ala Ala Ala Ile Ala Ala Arg Val Ala
50 55 60

Gly Gln Thr Arg Asn Ile Thr Val Asp Pro Arg Leu Phe Lys Lys Arg
65 70 75 80

Arg Leu Arg Ser Pro Arg Val Leu Phe Ser Thr Gln Pro Pro Arg Glu
85 90 95

Ala Ala Asp Thr Gln Asp Leu Asp Phe Glu Val Gly Gly Ala Ala Pro
100 105 110

Phe Asn Arg Thr His Arg Ser Lys Arg Ser Ser Ser His Pro Ile Phe
115 120 125

His Arg Gly Glu Phe Ser Val Cys Asp Ser Val Ser Val Trp Val Gly
130 135 140

Asp Lys Thr Thr Ala Thr Asp Ile Lys Gly Lys Glu Val Met Val Leu
145 150 155 160

Gly Glu Val Asn Ile Asn Asn Ser Val Phe Lys Gln Tyr Phe Phe Glu
165 170 175

Thr Lys Cys Arg Asp Pro Asn Pro Val Asp Ser Gly Cys Arg Gly Ile
180 185 190

Asp Ser Lys His Trp Asn Ser Tyr Cys Thr Thr Thr His Thr Phe Val
195 200 205

SequenceListing ST25.txt

Lys Ala Leu Thr Met Asp Gly Lys Gln Ala Ala Trp Arg Phe Ile Arg
210 215 220

Ile Asp Thr Ala Cys Val Cys Val Leu Ser Arg Lys Ala Val Arg Arg
225 230 235 240

Ala

<210> 7

<211> 246

<212> PRT

<213> Homo sapiens

<400> 7

Met Thr Ile Leu Phe Leu Thr Met Val Ile Ser Tyr Phe Gly Cys Met
1 5 10 15

Lys Ala Ala Pro Met Lys Glu Ala Asn Ile Arg Gly Gln Gly Gly Leu
20 25 30

Ala Tyr Pro Gly Val Arg Thr His Gly Thr Leu Glu Ser Val Asn Gly
35 40 45

Pro Lys Ala Gly Ser Gly Leu Thr Ser Leu Ala Asp Thr Phe Glu His
50 55 60

Val Ile Glu Glu Leu Leu Asp Glu Asp Gln Lys Val Arg Pro Asn Glu
65 70 75 80

Glu Asn Asn Lys Asp Ala Asp Leu Tyr Thr Ser Arg Val Met Leu Ser
85 90 95

Ser Gln Val Pro Leu Glu Pro Pro Leu Leu Phe Leu Leu Glu Glu Tyr
100 105 110

Lys Asn Tyr Leu Asp Ala Ala Asn Met Ser Met Arg Val Arg Arg His
115 120 125

Ser Asp Pro Ala Arg Arg Gly Glu Leu Ser Val Cys Asp Ser Ile Ser
130 135 140

Glu Trp Val Thr Ala Ala Asp Lys Lys Thr Ala Val Asp Met Ser Gly
145 150 155 160

Gly Thr Val Thr Val Leu Glu Lys Val Pro Val Ser Lys Gly Gln Leu
165 170 175

SequenceListing ST25.txt

Lys Gln Tyr Phe Tyr Glu Thr Lys Cys Asn Pro Met Gly Tyr Thr Lys
180 185 190

Glu Gly Cys Arg Gly Ile Asp Lys Arg His Trp Asn Ser Gln Cys Arg
195 200 205

Thr Thr Gln Ser Tyr Val Arg Ala Leu Thr Met Asp Ser Lys Lys Arg
210 215 220

Ile Gly Trp Arg Phe Ile Arg Ile Asp Thr Ser Cys Val Cys Thr Leu
225 230 235 240

Thr Ile Lys Arg Gly Arg
245

<210> 8

<211> 257

<212> PRT

<213> Homo sapiens

<400> 8

Met Ser Ile Leu Phe Tyr Val Ile Phe Leu Ala Tyr Leu Arg Gly Ile
1 5 10 15

Gln Gly Asn Asn Met Asp Gln Arg Ser Leu Pro Glu Asp Ser Leu Asn
20 25 30

Ser Leu Ile Ile Lys Leu Ile Gln Ala Asp Ile Leu Lys Asn Lys Leu
35 40 45

Ser Lys Gln Met Val Asp Val Lys Glu Asn Tyr Gln Ser Thr Leu Pro
50 55 60

Lys Ala Glu Ala Pro Arg Glu Pro Glu Arg Gly Gly Pro Ala Lys Ser
65 70 75 80

Ala Phe Gln Pro Val Ile Ala Met Asp Thr Glu Leu Leu Arg Gln Gln
85 90 95

Arg Arg Tyr Asn Ser Pro Arg Val Leu Leu Ser Asp Ser Thr Pro Leu
100 105 110

Glu Pro Pro Pro Leu Tyr Leu Met Glu Asp Tyr Val Gly Ser Pro Val
115 120 125

Val Ala Asn Arg Thr Ser Arg Arg Lys Arg Tyr Ala Glu His Lys Ser
130 135 140

SequenceListing ST25.txt

His Arg Gly Glu Tyr Ser Val Cys Asp Ser Glu Ser Leu Trp Val Thr
145 150 155 160

Asp Lys Ser Ser Ala Ile Asp Ile Arg Gly His Gln Val Thr Val Leu
165 170 175

Gly Glu Ile Lys Thr Gly Asn Ser Pro Val Lys Gln Tyr Phe Tyr Glu
180 185 190

Thr Arg Cys Lys Glu Ala Arg Pro Val Lys Asn Gly Cys Arg Gly Ile
195 200 205

Asp Asp Lys His Trp Asn Ser Gln Cys Lys Thr Ser Gln Thr Tyr Val
210 215 220

Arg Ala Leu Thr Ser Glu Asn Asn Lys Leu Val Gly Trp Arg Trp Ile
225 230 235 240

Arg Ile Asp Thr Ser Cys Val Cys Ala Leu Ser Arg Lys Ile Gly Arg
245 250 255

Thr

<210> 9

<211> 210

<212> PRT

<213> Homo sapiens

<400> 9

Met Leu Pro Leu Pro Ser Cys Ser Leu Pro Ile Leu Leu Leu Phe Leu
1 5 10 15

Leu Pro Ser Val Pro Ile Glu Ser Gln Pro Pro Pro Ser Thr Leu Pro
20 25 30

Pro Phe Leu Ala Pro Glu Trp Asp Leu Leu Ser Pro Arg Val Val Leu
35 40 45

Ser Arg Gly Ala Pro Ala Gly Pro Pro Leu Leu Phe Leu Leu Glu Ala
50 55 60

Gly Ala Phe Arg Glu Ser Ala Gly Ala Pro Ala Asn Arg Ser Arg Arg
65 70 75 80

Gly Val Ser Glu Thr Ala Pro Ala Ser Arg Arg Gly Glu Leu Ala Val
85 90 95

SequenceListing ST25.txt

Cys Asp Ala Val Ser Gly Trp Val Thr Asp Arg Arg Thr Ala Val Asp
100 105 110

Leu Arg Gly Arg Glu Val Glu Val Leu Gly Glu Val Pro Ala Ala Gly
115 120 125

Gly Ser Pro Leu Arg Gln Tyr Phe Phe Glu Thr Arg Cys Lys Ala Asp
130 135 140

Asn Ala Glu Glu Gly Gly Pro Gly Ala Gly Gly Gly Gly Cys Arg Gly
145 150 155 160

Val Asp Arg Arg His Trp Val Ser Glu Cys Lys Ala Lys Gln Ser Tyr
165 170 175

Val Arg Ala Leu Thr Ala Asp Ala Gln Gly Arg Val Gly Trp Arg Trp
180 185 190

Ile Arg Ile Asp Thr Ala Cys Val Cys Thr Leu Leu Ser Arg Thr Gly
195 200 205

Arg Ala
210

<210> 10

<211> 13

<212> PRT

<213> Homo sapiens

<400> 10

Gln Leu Tyr Glu Asn Lys Pro Arg Arg Pro Tyr Ile Leu
1 5 10

<210> 11

<211> 5

<212> PRT

<213> Homo sapiens

<400> 11

Ile Pro Tyr Ile Leu
1 5

<210> 12

<211> 357

SequenceListing ST25.txt

<212> PRT

<213> Homo sapiens

<400> 12

Met Ala Pro Arg Arg Val Arg Ser Phe Leu Arg Gly Leu Pro Ala Leu
1 5 10 15

Leu Leu Leu Leu Leu Phe Leu Gly Pro Trp Pro Ala Ala Ser His Gly
20 25 30

Gly Lys Tyr Ser Arg Glu Lys Asn Gln Pro Lys Pro Ser Pro Lys Arg
35 40 45

Glu Ser Gly Glu Glu Phe Arg Met Glu Lys Leu Asn Gln Leu Trp Glu
50 55 60

Lys Ala Gln Arg Leu His Leu Pro Pro Val Arg Leu Ala Glu Leu His
65 70 75 80

Ala Asp Leu Lys Ile Gln Glu Arg Asp Glu Leu Ala Trp Lys Lys Leu
85 90 95

Lys Leu Asp Gly Leu Asp Glu Asp Gly Glu Lys Glu Ala Arg Leu Ile
100 105 110

Arg Asn Leu Asn Val Ile Leu Ala Lys Tyr Gly Leu Asp Gly Lys Lys
115 120 125

Asp Ala Arg Gln Val Thr Ser Asn Ser Leu Ser Gly Thr Gln Glu Asp
130 135 140

Gly Leu Asp Asp Pro Arg Leu Glu Lys Leu Trp His Lys Ala Lys Thr
145 150 155 160

Ser Gly Lys Phe Ser Gly Glu Glu Leu Asp Lys Leu Trp Arg Glu Phe
165 170 175

Leu His His Lys Glu Lys Val His Glu Tyr Asn Val Leu Leu Glu Thr
180 185 190

Leu Ser Arg Thr Glu Glu Ile His Glu Asn Val Ile Ser Pro Ser Asp
195 200 205

Leu Ser Asp Ile Lys Gly Ser Val Leu His Ser Arg His Thr Glu Leu
210 215 220

Lys Glu Lys Leu Arg Ser Ile Asn Gln Gly Leu Asp Arg Leu Arg Arg
225 230 235 240

SequenceListing ST25.txt

Val Ser His Gln Gly Tyr Ser Thr Glu Ala Glu Phe Glu Glu Pro Arg
245 250 255

Val Ile Asp Leu Trp Asp Leu Ala Gln Ser Ala Asn Leu Thr Asp Lys
260 265 270

Glu Leu Glu Ala Phe Arg Glu Glu Leu Lys His Phe Glu Ala Lys Ile
275 280 285

Glu Lys His Asn His Tyr Gln Lys Gln Leu Glu Ile Ala His Glu Lys
290 295 300

Leu Arg His Ala Glu Ser Val Gly Asp Gly Glu Arg Val Ser Arg Ser
305 310 315 320

Arg Glu Lys His Ala Leu Leu Glu Gly Arg Thr Lys Glu Leu Gly Tyr
325 330 335

Thr Val Lys Lys His Leu Gln Asp Leu Ser Gly Arg Ile Ser Arg Ala
340 345 350

Arg His Asn Glu Leu
355

<210> 13

<211> 170

<212> PRT

<213> Homo sapiens

<400> 13

Met Met Ala Gly Met Lys Ile Gln Leu Val Cys Met Leu Leu Leu Ala
1 5 10 15

Phe Ser Ser Trp Ser Leu Cys Ser Asp Ser Glu Glu Glu Met Lys Ala
20 25 30

Leu Glu Ala Asp Phe Leu Thr Asn Met His Thr Ser Lys Ile Ser Lys
35 40 45

Ala His Val Pro Ser Trp Lys Met Thr Leu Leu Asn Val Cys Ser Leu
50 55 60

Val Asn Asn Leu Asn Ser Pro Ala Glu Glu Thr Gly Glu Val His Glu
65 70 75 80

Glu Glu Leu Val Ala Arg Arg Lys Leu Pro Thr Ala Leu Asp Gly Phe
85 90 95

SequenceListing ST25.txt

Ser Leu Glu Ala Met Leu Thr Ile Tyr Gln Leu His Lys Ile Cys His
100 105 110

Ser Arg Ala Phe Gln His Trp Glu Leu Ile Gln Glu Asp Ile Leu Asp
115 120 125

Thr Gly Asn Asp Lys Asn Gly Lys Glu Glu Val Ile Lys Arg Lys Ile
130 135 140

Pro Tyr Ile Leu Lys Arg Gln Leu Tyr Glu Asn Lys Pro Arg Arg Pro
145 150 155 160

Tyr Ile Leu Lys Arg Asp Ser Tyr Tyr Tyr
165 170